

# STN-Structure Search

8/20/07

10/510,579

=> d ibib abs hitstr 1-7

L8 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:473169 CAPLUS

DOCUMENT NUMBER: 147:72438

TITLE: Self-assembly of semifluorinated minidendrons attached to electron-acceptor groups into pyramidal columns

AUTHOR(S): Percec, Virgil; Aqad, Emad; Peterca, Mihai; Imam, Mohammad R.; Glodde, Martin; Bera, Tusha K.; Miura, Yoshiko; Balagurusamy, Venkatachalapathy S. K.; Ewbank, Paul C.; Wuerthner, Frank; Heiney, Paul A.

CORPORATE SOURCE: Roy & Diana Vagelos Laboratories, Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104-6323, USA

SOURCE: Chemistry--A European Journal (2007), 13(12), 3330-3345

CODEN: CEUJED; ISSN: 0947-6539

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis and self-assembly of twelve semifluorinated first-generation dendrons or minidendrons attached to electron-acceptor (n-type) groups generated from various combinations of eight acceptors and three dendrons are reported. Dendrons attached to small electron-acceptor mols. mediate their self-assembly into  $\pi$ -stacks located in the center of a supramol. helical pyramidal column with the long axis of the acceptor perpendicular to the long axis of the column. Dendrons attached to large electron-acceptor mols., such as perylene bisimide, mediate the assembly of their acceptors in an unprecedented arrangement of  $\pi$ -stacks that have the long axis of the acceptors parallel to the long axis of the supramol. pyramidal column. All supra-mol. columns self-organize into various periodic columnar arrays that exhibit liquid-crystalline phases, crystalline phases, or a liquid-crystalline phase with enhanced intracolumnar order. The present study demonstrates the simplicity and the versatility of the concept of assembly of n-type electroactive groups mediated by semifluorinated dendrons and assesses the scope and limitations of this supramol. strategy.

IT 941677-47-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

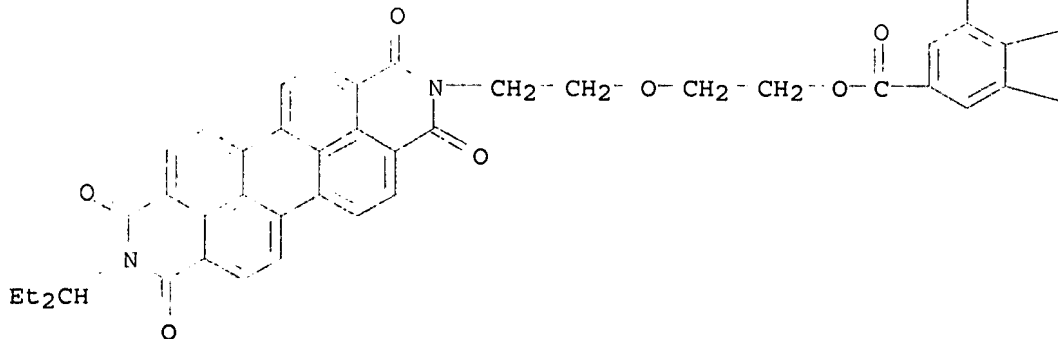
(self-assembly of semifluorinated minidendrons attached to electron-acceptor groups into pyramidal columns)

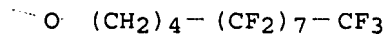
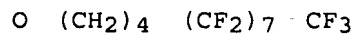
RN 941677-47-0 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

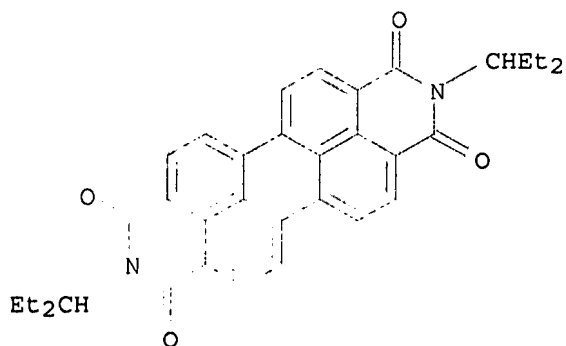
PAGE 1-A

F<sub>3</sub>C (CF<sub>2</sub>)<sub>7</sub> (CH<sub>2</sub>)<sub>4</sub> O

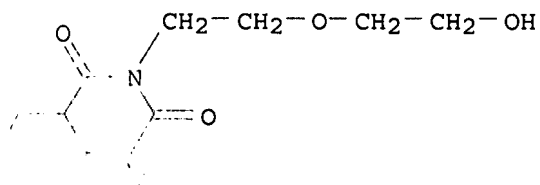




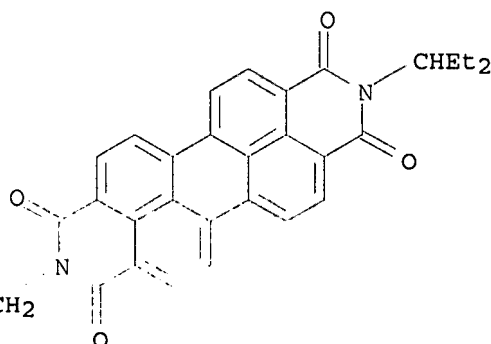
IT 110590-81-3P 651768-35-3P 941677-46-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP  
 (Preparation); RACT (Reactant or reagent)  
 (self-assembly of semifluorinated minidendrons attached to  
 electron-acceptor groups into pyramidal columns)  
 RN 110590-81-3 CAPLUS  
 CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
 2,9-bis(1-ethylpropyl)- (CA INDEX NAME)



RN 651768-35-3 CAPLUS  
 CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-[2-(2-hydroxyethoxy)ethyl]- (CA  
 INDEX NAME)



RN 941677-46-9 CAPLUS  
 CN INDEX NAME NOT YET ASSIGNED



REFERENCE COUNT: 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1245526 CAPLUS

DOCUMENT NUMBER: 146:155297

TITLE: Tri-, tetra- and heptacyclic perylene analogues as new potential antineoplastic agents based on DNA telomerase inhibition

AUTHOR(S): Sissi, Claudia; Lucatello, Lorena; Paul Krapcho, A.; Maloney, David J.; Boxer, Matthew B.; Camarasa, Maria V.; Pezzoni, Gabriella; Menta, Ernesto; Palumbo, Manlio

CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Padova, Padua, 5-35131, Italy

SOURCE: Bioorganic & Medicinal Chemistry (2007), 15(1), 555-562

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A recent approach in anticancer chemotherapy envisages telomerase as a potentially useful target. An attractive strategy deals with the development of compds. able to stabilize telomeric DNA in the G-quadruplex folded structure and, among them, a prominent position is found in the perylenes. With the aim to further investigate the role of drug structure, in view of possible pharmaceutical applications, the authors synthesized a series of compds. related to PIPER, a well-known perylene-based telomerase inhibitor. The authors modified the number of condensed aromatic rings and introduced different side chains to modulate drug protonation state and extent of self-aggregation. Effective telomerase inhibition was induced by heptacyclic analogs only, some showing a remarkably wide selectivity index with reference to inhibition of Taq polymerase. G-quadruplex stabilization was monitored by CD and melting expts. Cell cytotoxicity measurements indicated a poor short-term cell killing ability for the best G-quartet binders. Besides the presence of a planar seven-condensed ring system, the introduction of a cyclic amine in the side chains critically affects the selectivity window.

IT 154355-16-5P 236735-00-5P 236735-02-7P

920490-26-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

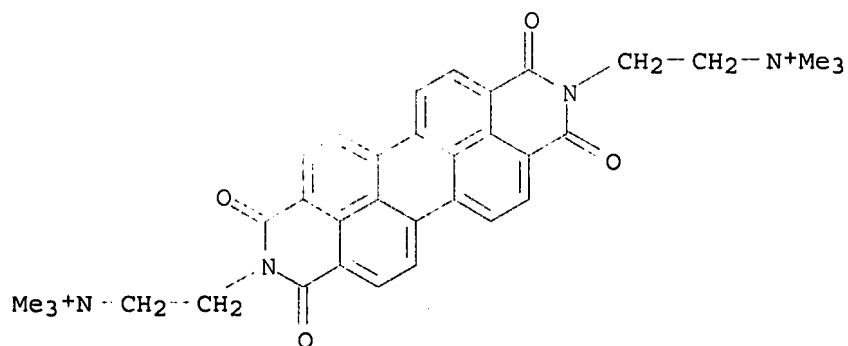
(tri-, tetra- and heptacyclic perylene analogs as new potential antineoplastic agents based on DNA telomerase inhibition)

RN 154355-16-5 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-2,9-diethanamminium, 1,3,8,10-tetrahydro-N2,N2,N2,N9,N9,N9-hexamethyl-1,3,8,10-tetraoxo-,

10/510,579

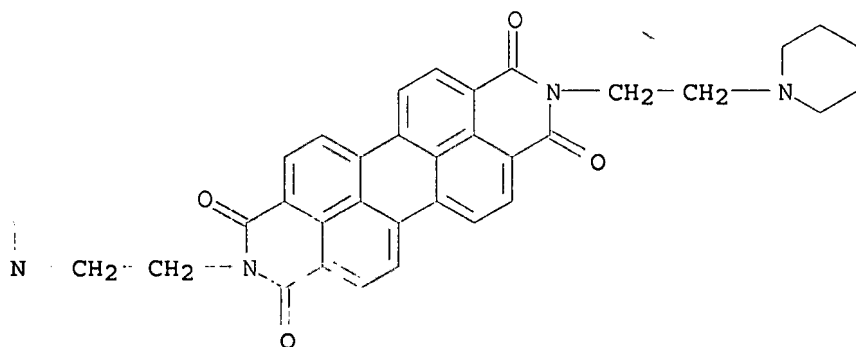
iodide (1:2) (CA INDEX NAME)



●2  $\text{I}^-$

RN 236735-00-5 CAPLUS

CN 2,9-Diazacyclooctane-1,3,8,10-tetrone, 2,9-bis[2-(1-piperidiny)ethyl]-, hydrochloride (1:2) (CA INDEX NAME)

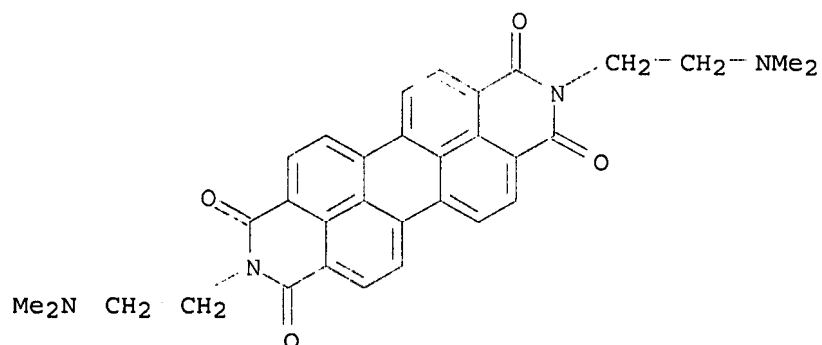


●2  $\text{HCl}$

RN 236735-02-7 CAPLUS

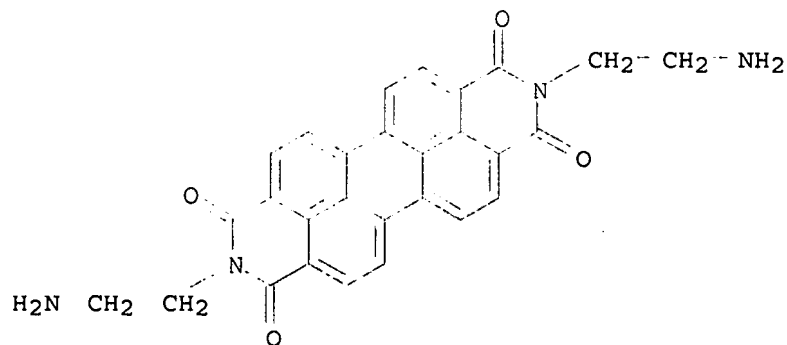
CN 2,9-Diazacyclononadecane-1,3,8,10-tetrone, 2,9-bis[2-(dimethylamino)ethyl]-, hydrochloride (1:2) (CA INDEX NAME)

10/510,579



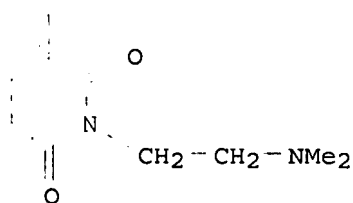
● 2 HCl

RN 920490-26-2 CAPLUS  
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-bis(2-aminoethyl)-, hydrochloride (1:2) (9CI) (CA INDEX NAME)



● 2 HCl

IT 79070-66-9P, N-[2-[Dimethylamino]ethyl]-1,8-naphthalimide  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)  
(tri-, tetra- and heptacyclic perylene analogs as new potential  
antineoplastic agents based on DNA telomerase inhibition)  
RN 79070-66-9 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-[2-(dimethylamino)ethyl]- (CA  
INDEX NAME)



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:20366 CAPLUS

DOCUMENT NUMBER: 134:237379

TITLE: Perylene derivatives formation in reaction of 3-bromobenzanthrone and 4-bromonaphthalic acid derivatives with a reduction system NiCl<sub>2</sub>-2,2'-bipyridyl (or 1,10-phenanthroline)-Zn

AUTHOR(S): Adonin, N. Yu.; Ryabinin, V. A.; Starichenko, V. F.

CORPORATE SOURCE: Vorozhtsov Novosibirsk Institute of Organic Chemistry, Siberian Division, Russian Academy of Sciences, Novosibirsk, 630090, Russia

SOURCE: Russian Journal of Organic Chemistry (Translation of Zhurnal Organicheskoi Khimii) (2000), 36(6), 861-865  
CODEN: RJOCEQ; ISSN: 1070-4280

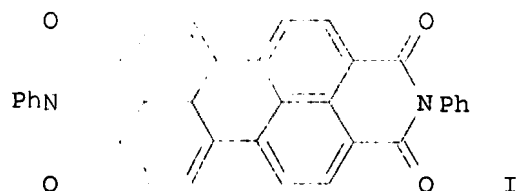
PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:237379

GI



AB The reaction of 3-bromobenzanthrone and 4-bromonaphthalic acid derivs. with a reduction system NiCl<sub>2</sub>-2,2'-bipyridyl (or 1,10-phenanthroline)-Zn gives rise to compds. containing perylene fragment, e.g. I. Under similar conditions was established a possibility to transform substituted 1,1'-binaphthyls into the corresponding perylene derivs.

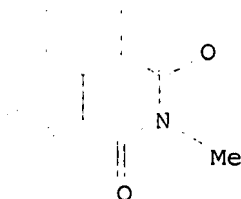
IT 2382-08-3, 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-methyl-

RL: RCT (Reactant); RACT (Reactant or reagent)

(perylene derivs. formation in reaction of 3-bromobenzanthrone and 4-bromonaphthalic acid derivs. with a reduction system nickel chloride-2,2'-bipyridyl (or 1,10-phenanthroline)-zinc)

RN 2382-08-3 CAPLUS

CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-methyl- (CA INDEX NAME)



IT 5521-31-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

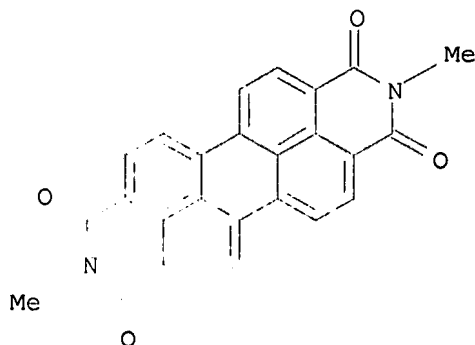
(perylene derivs. formation in reaction of 3-bromobenzanthrone and 4-bromonaphthalic acid derivs. with a reduction system nickel

10/510,579

chloride-2,2'bipyridyl (or 1,10-phenanthroline)-zinc)

RN 5521-31-3 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-dimethyl- (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:875960 CAPLUS

DOCUMENT NUMBER: 134:164454

TITLE: A "green" route to perylene dyes: direct coupling reactions of 1,8-naphthalimide and related compounds under mild conditions Using a "new" base complex reagent, t-BuOK/DBN

AUTHOR(S): Sakamoto, Takaaki; Pac, Chyongjin

CORPORATE SOURCE: Kawamura Institute of Chemical Research, Sakura Chiba, 285-0078, Japan

SOURCE: Journal of Organic Chemistry (2001), 66(1), 94-98  
CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:164454

AB The direct coupling (cyclodimerization) reactions of 1,8-naphthalimide compds. efficiently occurred at 130 or 170°C without the intervention of the leuco form dyes in the presence of base complex reagent, tert-BuOK/1,5-diazabicyclo[4.3.0]non-5-ene (DBN), to give the corresponding perylene dyes in good yields with >95% purities. A possible mechanistic speculation for these oxidative coupling reactions is briefly discussed.

IT 5521-31-3P 26872-64-0P 52000-81-4P

58935-22-1P 73528-89-9P 78151-58-3P

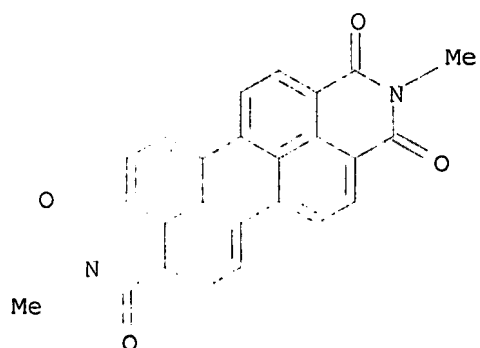
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dye; oxidative coupling of naphthalimides to perylenedicarboximide dyes)

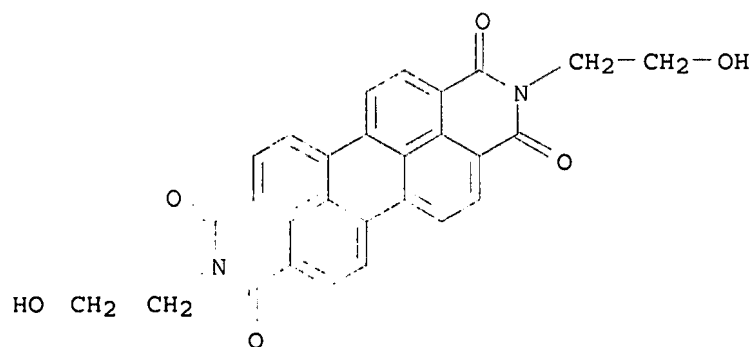
RN 5521-31-3 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-dimethyl- (CA INDEX NAME)

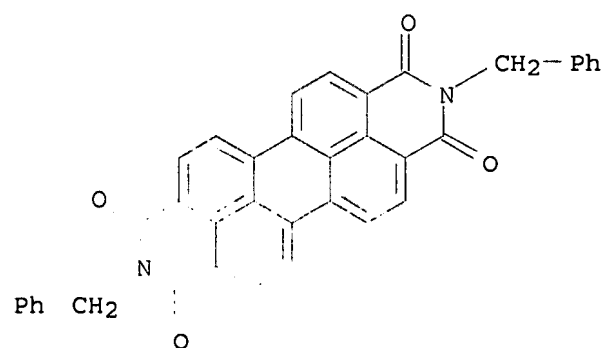
10/510,579



RN 26872-64-0 CAPLUS  
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-bis(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



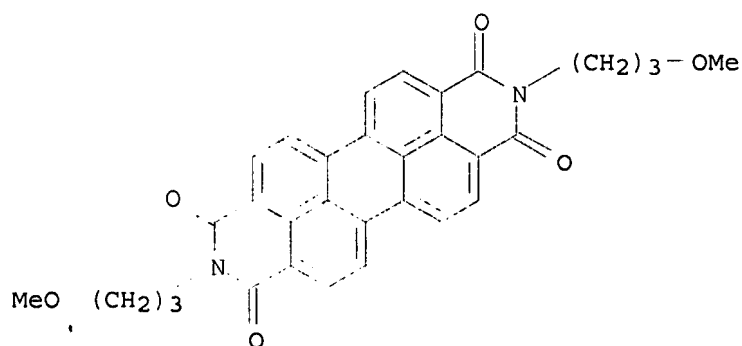
RN 52000-81-4 CAPLUS  
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-bis(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 58935-22-1 CAPLUS  
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-bis(3-methoxypropyl)- (9CI) (CA INDEX NAME)

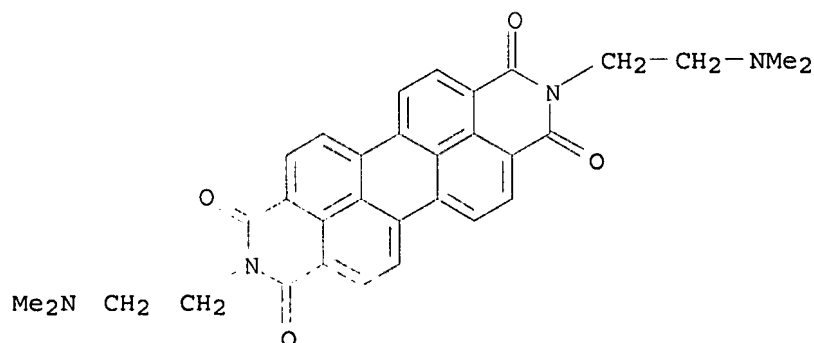


10/510,579



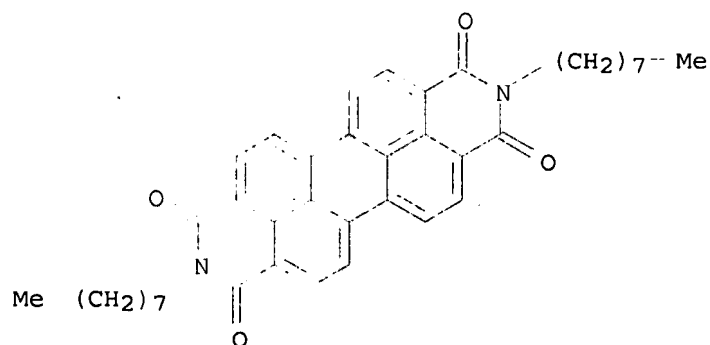
RN 73528-89-9 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-bis[2-(dimethylamino)ethyl]- (9CI) (CA INDEX NAME)



RN 78151-58-3 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-dioctyl- (CA INDEX NAME)



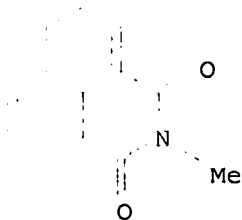
IT 2382-08-3, N-Methyl-1,8-naphthalimide 2896-24-4,  
N-Benzyl-1,8-naphthalimide 5450-40-8, N-(2-Hydroxyethyl)-1,8-  
naphthalimide 39061-46-6, N-Octyl-1,8-naphthalimide  
60100-03-0, N-(3-Methoxypropyl)-1,8-naphthalimide  
79070-66-9, N-[2-(Dimethylamino)ethyl]-1,8-naphthalimide

RL: RCT (Reactant); RACT (Reactant or reagent)  
(starting material; oxidative coupling of naphthalimides to  
perylene-dicarboximide dyes)

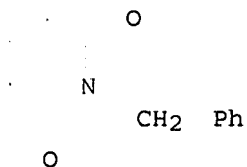
RN 2382-08-3 CAPLUS

CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-methyl- (CA INDEX NAME)

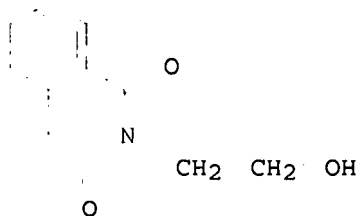
10/510,579



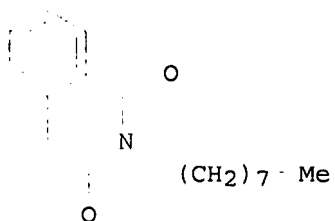
RN 2896-24-4 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(phenylmethyl)- (CA INDEX NAME)



RN 5450-40-8 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(2-hydroxyethyl)- (CA INDEX NAME)

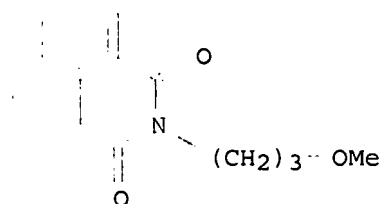


RN 39061-46-6 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-octyl- (9CI) (CA INDEX NAME)

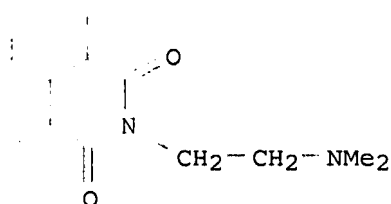


RN 60100-03-0 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(3-methoxypropyl)- (CA INDEX NAME)

10/510,579



RN 79070-66-9 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-[2-(dimethylamino)ethyl]- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:78464 CAPLUS

DOCUMENT NUMBER: 130:153479

TITLE: Reagents for condensation reaction of condensed polycyclic aromatic compounds

INVENTOR(S): Sakamoto, Takaaki; Yonehara, Yoshitomo; Boku, Shoshin

PATENT ASSIGNEE(S): Kawamura Institute of Chemical Research, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|-------------|------|----------|-----------------|----------|
| JP 11029499 | A    | 19990202 | JP 1997-183343  | 19970709 |

PRIORITY APPLN. INFO.: JP 1997-183343 19970709

OTHER SOURCE(S): CASREACT 130:153479

AB Title reagents contain alkali metal alkoxides and organic bases having an azabicyclo ring. T-BuOK and 1,5-diazabicyclo[4,3,0]-5-nonene were heated in diglyme at 170° for 1 h and treated with 1,8-naphthalimide at 170° for 8 h to give 99% perylene-3,4,9,10-tetracarboxylic acid diimide.

IT 5521-31-3P, N,N'-Dimethylperylene-3,4,9,10-tetracarboxylic acid diimide 52000-81-4P

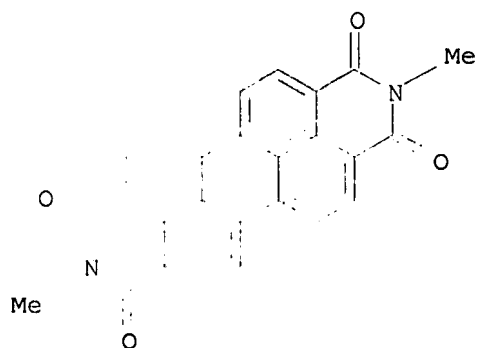
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(condensation of condensed polycyclic aromatic compds. using alkali alkoxides and azabicyclo compds.)

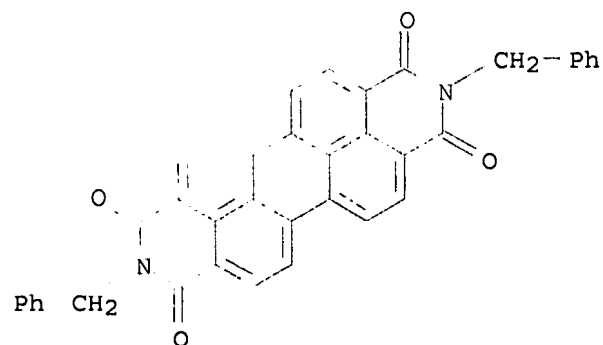
RN 5521-31-3 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone, 2,9-dimethyl- (CA INDEX NAME)

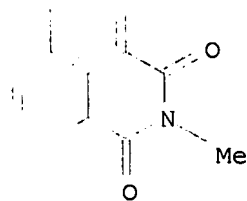
10/510,579



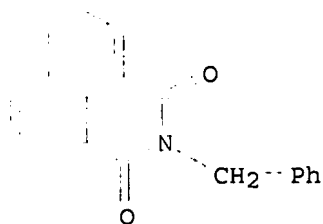
RN 52000-81-4 CAPLUS  
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-bis(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 2382-08-3, N-Methyl-1,8-naphthalimide 2896-24-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(condensation of condensed polycyclic aromatic compds. using alkali  
alkoxides and azabicyclo compds.)  
RN 2382-08-3 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-methyl- (CA INDEX NAME)



RN 2896-24-4 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(phenylmethyl)- (CA INDEX NAME)



L8 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:673648 CAPLUS

DOCUMENT NUMBER: 130:14915

TITLE: Aryl coupling reactions using a novel base complex reagents for synthesis of polycyclic organic pigments

AUTHOR(S): Sakamoto, Takaaki; Yonehara, Hisatomo; Pac, Chyongjin

CORPORATE SOURCE: Japan

SOURCE: Kawamura Rikagaku Kenkyusho Hokoku (1997) 45-51

CODEN: KRKHFZ; ISSN: 0917-7841

PUBLISHER: Kawamura Rikagaku Kenkyusho

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB IN a preliminary previous paper, it was reported that an anal. pure material of perylene derivative was prepared in >95% yield upon heating a mixture

of 1,8-naphthalimide, t-BuOK, 1,5-diazabicyclo[4,3,0]non-5-ene (DBN), and diglyme at 130°. This synthetic method has been successfully applied to the coupling reactions of N-substituted 1,8-naphthalimides, 1,8-naphthalenedicarbonylbenzimidazole, acenaphtho[1,2-b]quinoxaline, mesobenzanthrone, and 2-aminoanthraquinone.

IT 5521-31-3P 26872-64-0P 52000-81-4P

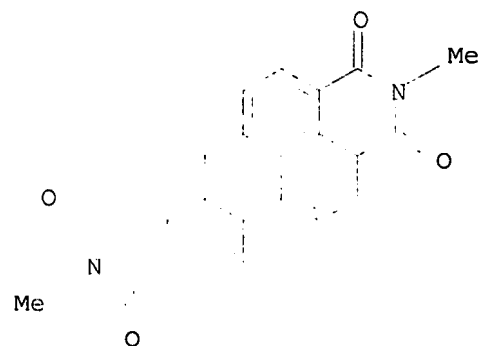
58935-22-1P 73528-89-9P 78151-58-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(aryl coupling reactions using novel base complex reagents for synthesis of polycyclic organic pigments)

RN 5521-31-3 CAPLUS

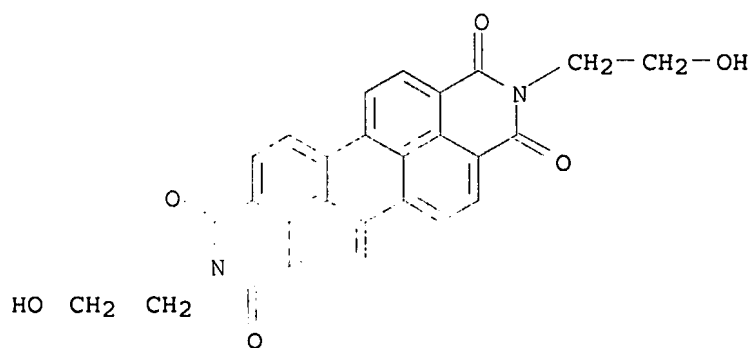
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone, 2,9-dimethyl- (CA INDEX NAME)



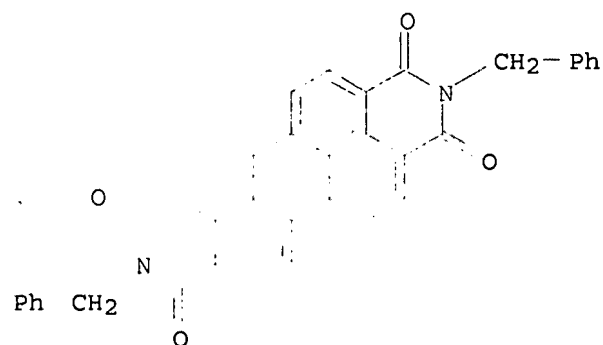
RN 26872-64-0 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone, 2,9-bis(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

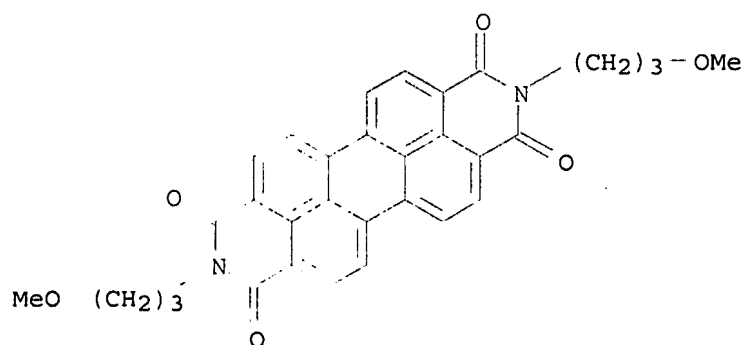
10/510,579



RN 52000-81-4 CAPLUS  
 CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
 2,9-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

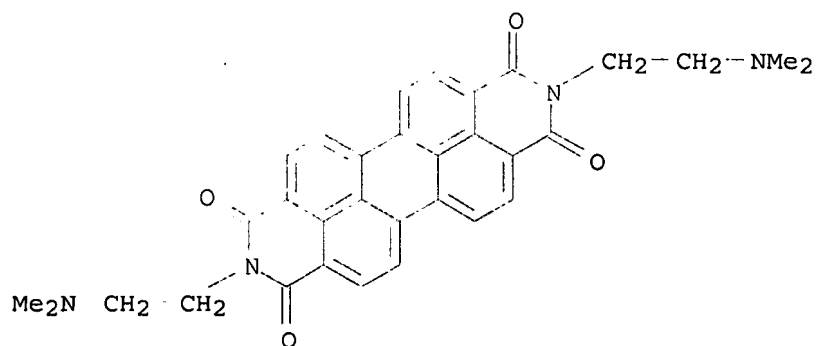


RN 58935-22-1 CAPLUS  
 CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
 2,9-bis(3-methoxypropyl)- (9CI) (CA INDEX NAME)



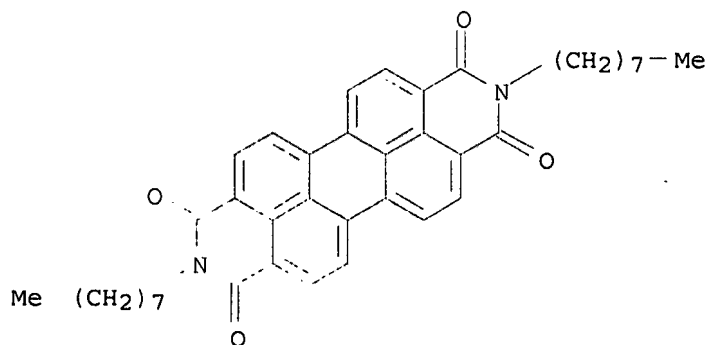
RN 73528-89-9 CAPLUS  
 CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
 2,9-bis[2-(dimethylamino)ethyl]- (9CI) (CA INDEX NAME)

10/510,579



RN 78151-58-3 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-dioctyl- (CA INDEX NAME)



IT 2382-08-3 2896-24-4 5450-40-8

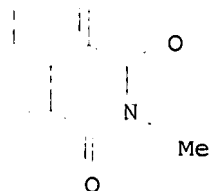
39061-46-6 60100-03-0 79070-66-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; aryl coupling reactions using novel base complex reagents  
for synthesis of polycyclic organic pigments)

RN 2382-08-3 CAPLUS

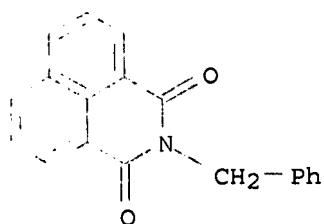
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-methyl- (CA INDEX NAME)



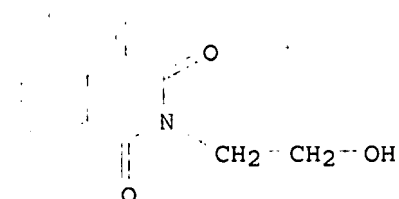
RN 2896-24-4 CAPLUS

CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(phenylmethyl)- (CA INDEX NAME)

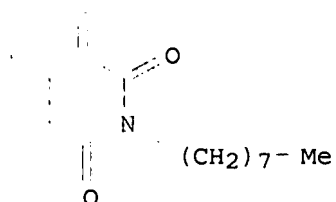
10/510,579



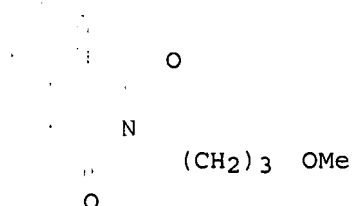
RN 5450-40-8 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(2-hydroxyethyl)- (CA INDEX NAME)



RN 39061-46-6 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-octyl- (9CI) (CA INDEX NAME)

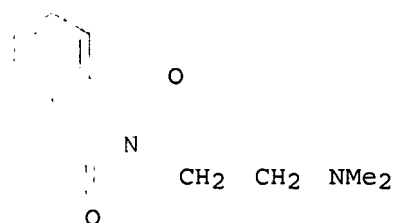


RN 60100-03-0 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(3-methoxypropyl)- (CA INDEX NAME)



RN 79070-66-9 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-[2-(dimethylamino)ethyl]- (CA INDEX NAME)





L8 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:555404 CAPLUS

DOCUMENT NUMBER: 127:206939

TITLE: Direct one-step dimerization of condensed polynuclear aromatic compounds

INVENTOR(S): Sakamoto, Takaaki; Yonehara, Yoshitomo; Boku, Shoshin

PATENT ASSIGNEE(S): Kawamura Rikagaku Kenkyusho, Japan

SOURCE: Jpn. Kokai Tokyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|-------------|------|----------|-----------------|------------|
| JP 09194746 | A    | 19970729 | JP 1996-73857   | 19960328   |
|             |      |          | JP 1995-294142  | A 19951113 |

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): CASREACT 127:206939

AB The title process for making dyes and pigments and electronic materials is carried out in a system containing alkali metal hydroxide and/or alkoxide and azabicyclo ring-containing organic base. A mixture of tert-BuOK, 1,5-diazabicyclo[4.3.0]non-5-ene, and diglyme was stirred at 170° for 1 h under N atmospheric, treated with 1,8-naphthalimide at the same temperature for

8 h to obtain perylene-3,4,9,10-tetracarboxylic diimide in 99% yield.

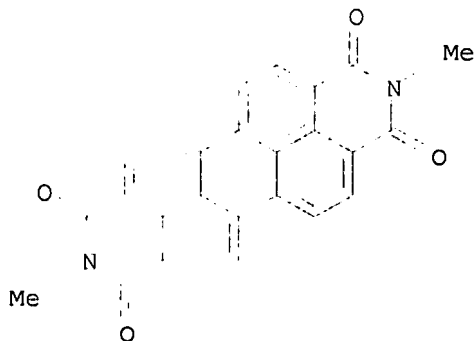
IT 5521-31-3P, N,N'-Dimethylperylene-3,4,9,10-tetracarboxylic diimide  
52000-81-4P

RL: IMF (Industrial manufacture); PREP (Preparation)

(direct one-step dimerization of condensed polynuclear aromatic compds.)

RN 5521-31-3 CAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,  
2,9-dimethyl- (CA INDEX NAME)

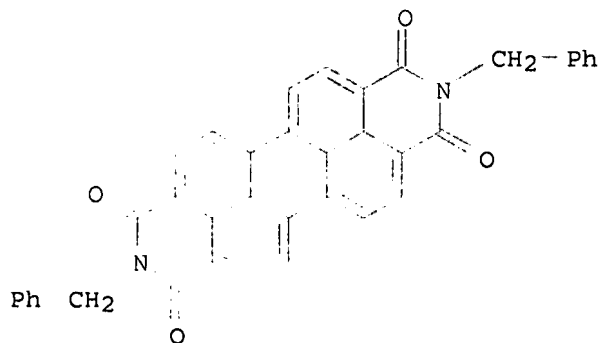


RN 52000-81-4 CAPLUS

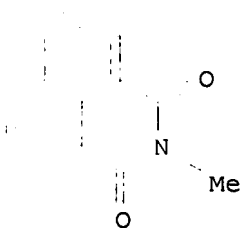
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,

10/510,579

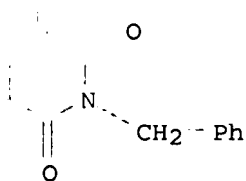
2,9-bis(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 2382-08-3, N-Methyl-1,8-Naphthalimide 2896-24-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(direct one-step dimerization of condensed polynuclear aromatic compds.)  
RN 2382-08-3 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-methyl- (CA INDEX NAME)



RN 2896-24-4 CAPLUS  
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 2-(phenylmethyl)- (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 09:37:56 ON 20 AUG 2007)

FILE 'REGISTRY' ENTERED AT 09:38:09 ON 20 AUG 2007

L1 STRUCTURE UPLOADED  
L2 STRUCTURE UPLOADED  
L3 50 S L1  
L4 946 S L1 FULL  
L5 3703 S L2 FULL

FILE 'CAPLUS' ENTERED AT 09:41:16 ON 20 AUG 2007

L6 333 S L4/PREP

10/510,579

L7 229 S L5/RCT  
L8 7 S L6 AND L7

=> d 11

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> d 12

L2 HAS NO ANSWERS

L2 STR

O N O



Structure attributes must be viewed using STN Express query preparation.

=>